

FIG. 1

101-103

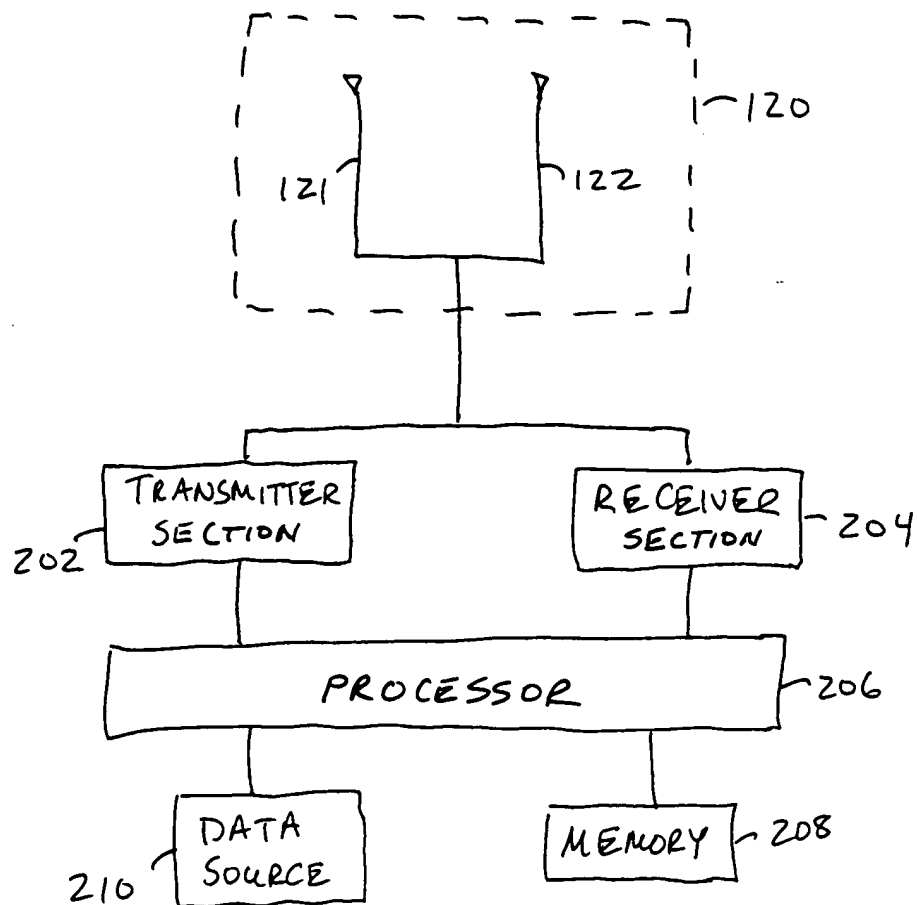


FIG. 2

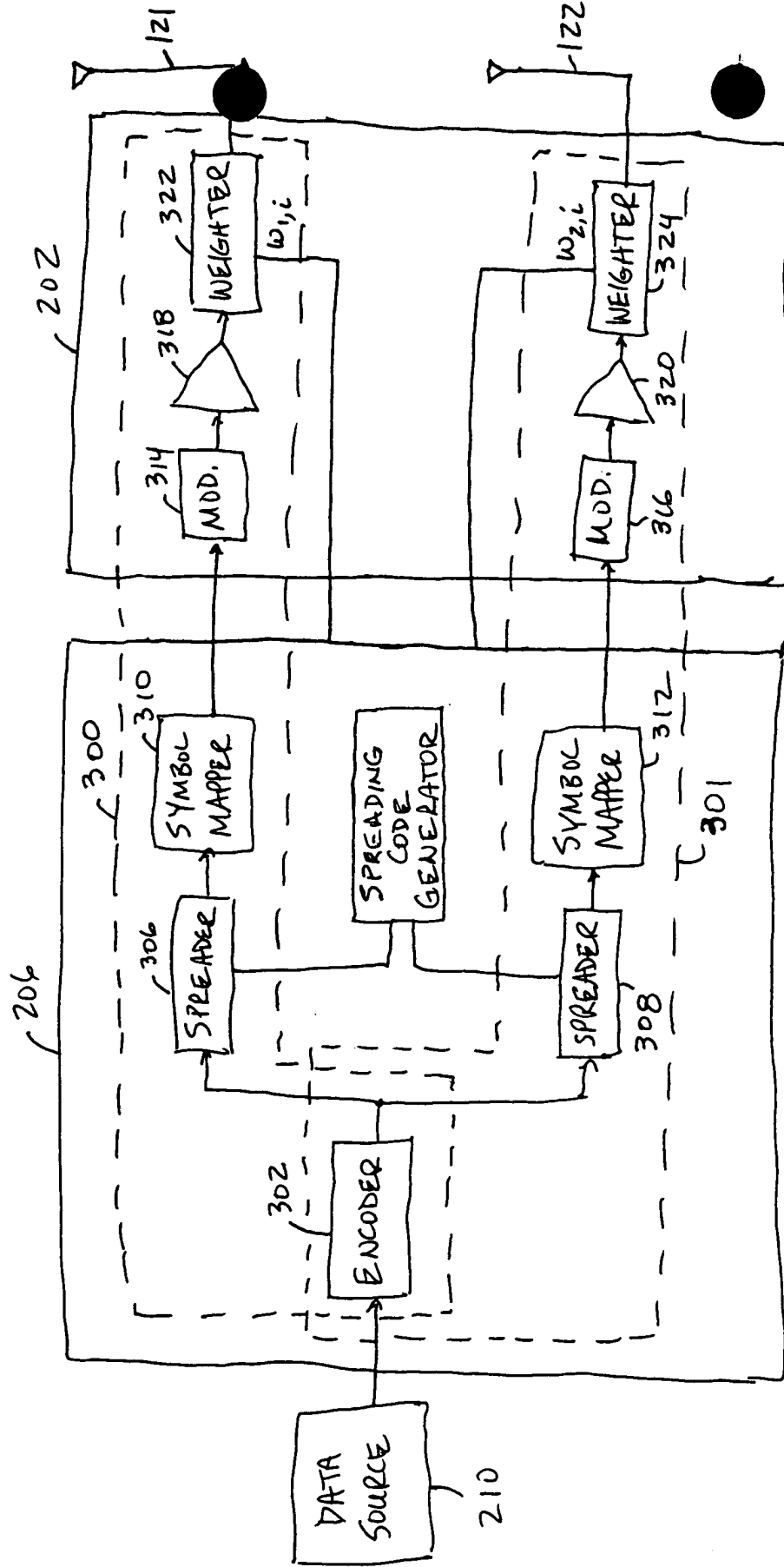


FIG. 3

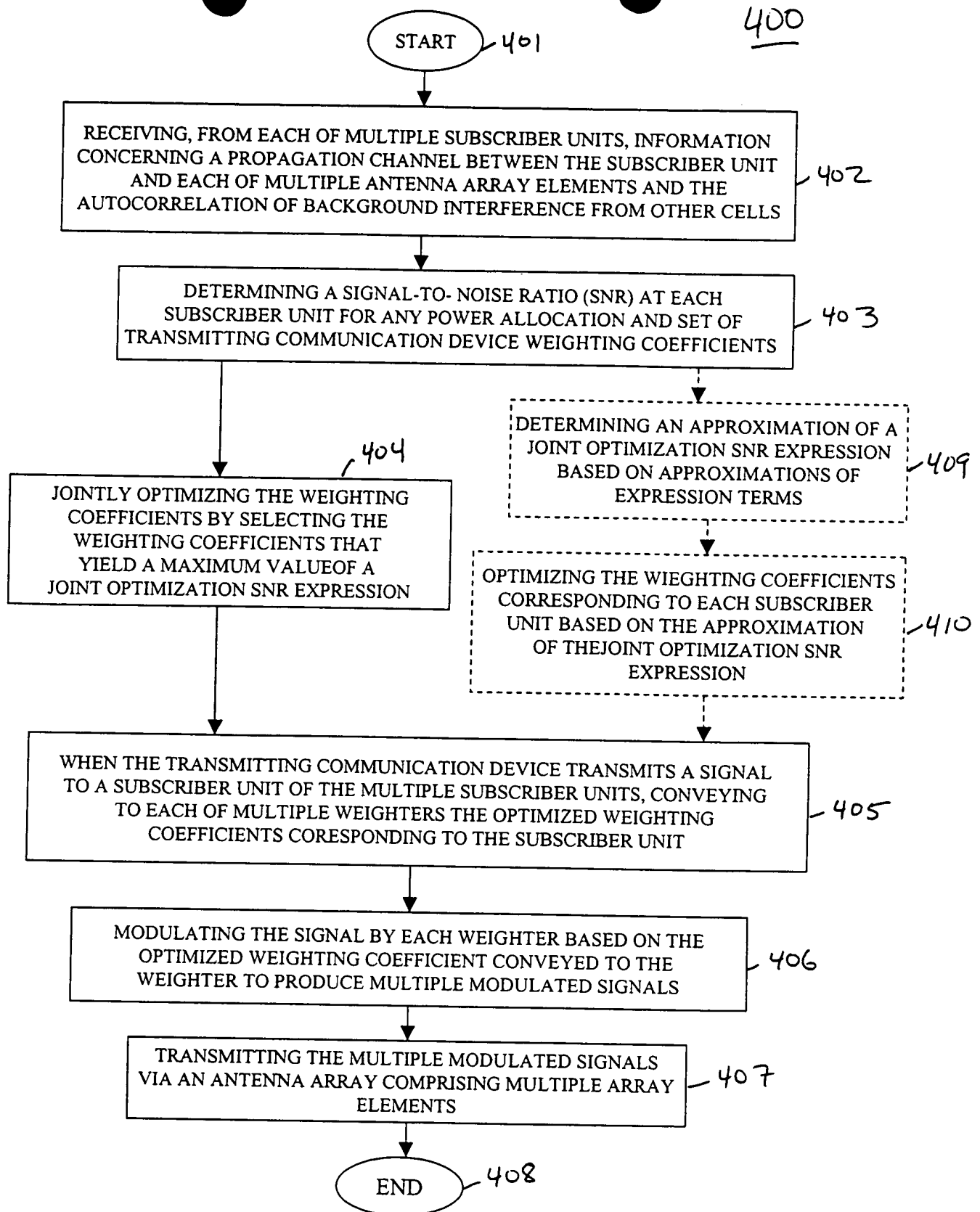


FIG. 4

	$(E_s/N_t)_{\text{TxAA}} - (E_s/N_t)_{\text{STD}} \text{ (dB)}$			
$E_c/I_{\text{or}}$	$I_{\text{or}}/I_{\text{oc}} = 0 \text{ dB}$	$I_{\text{or}}/I_{\text{oc}} = 5 \text{ dB}$	$I_{\text{or}}/I_{\text{oc}} = 10 \text{ dB}$	$I_{\text{or}}/I_{\text{oc}} = \infty \text{ dB}$
0.05	2.00	1.66	1.28	0.92
0.1	1.94	1.52	1.07	0.61
0.2	1.82	1.25	0.62	-0.03
0.5	1.44	0.37	-0.93	-2.45
0.9	0.91	-1.01	-3.85	-9.88

A comparison of the performance of TxAA antenna array weighting and STD as a function of  $I_{\text{or}}/I_{\text{oc}}$  and  $E_c/I_{\text{or}}$ .

**FIG. 5**

	$(E_s/N_t)_{\text{Optimal}} - (E_s/N_t)_{\text{TxAA}} \text{ (dB)}$			
$E_c/I_{or}$	$I_{or}/I_{oc} = 0 \text{ dB}$	$I_{or}/I_{oc} = 5 \text{ dB}$	$I_{or}/I_{oc} = 10 \text{ dB}$	$I_{or}/I_{oc} = \infty \text{ dB}$
0.05	0.02	0.09	0.21	0.36
0.1	0.03	0.13	0.29	0.51
0.2	0.05	0.22	0.51	0.90
0.5	0.14	0.65	1.55	2.84
0.9	0.36	1.62	4.03	9.89

A comparison of the performance of optimized transmitter antenna array weighting of the present invention (optimal) with the TxAA transmitter antenna array weighting of the prior art as a function of  $I_{or}/I_{oc}$  and  $E_c/I_{or}$ .

**FIG. 6**